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A REVIEW ON: HERBAL COLD CREAM: CREAM FOR COMPREHENSIVE SKINCARE

Dr. Kailas. M. Karande¹, Akanksha Ugale², Arpita Zanzane³, Disha Vidhate⁴

¹Assistant Professor, ²Student, ³Student, ⁴Student

Department Of Pharmaceutical Chemistry

Arvind Gavali College of Pharmacy, Jaitapur Satara

ABSTRACT:

In recent days Herbal cosmetics are widely used as compared to that of synthetic cosmetics. The demand for herbal cosmetics is increasing rapidly due their lack of side effects. Herbal cosmetics are goods meant to improve and beautify the appearance of people. The formulation and evaluation of a multipurpose cream enhanced with aloe Vera gel, neem, and tulsi extracts in addition to other excipients are the main topics of this study. Aloe Vera gel's hydrating and relaxing properties are combined with the antibacterial and antioxidant properties of neem and tulsi to create a synergistic blend that tackles a variety of skincare issues. The cream is meticulously formulated with consideration for stability, consistency, and skin compatibility. The method includes a detailed evaluation of a cream's functional qualities, such as moisturization, antibacterial efficacy, and antioxidant activity, as well as its physical qualities, such texture, spreadability, and appearance. The cream's efficacious composition and potential multifunctional advantages for skincare are shown by the results. This study opens the door for more investigation and advancement in this field by highlighting the potential of natural components in the formulation of skincare products.

KEYWORDS: Neem, Tulsi, Aloe Vera, synergistic herbal cream, stability.

INTRODUCTION

Creams are prized for their simplicity of application and removal from the skin; they have been used as topical treatments in cosmetic products from the dawn of time. Herbal creams are used for many different cosmetic applications, such as protecting skin from fungi and germs, cleaning and beautifying the skin, altering look, hydrating, healing burns, cuts. It is safe for society and the general public to use these semi-solid preparations. Even though human skin is often harmed, it can repair itself. Nonetheless, infection is a risk, especially in the initial phases of an injury, and the healing process itself could take some time. In these circumstances, medicated creams can help solve such issues. Our work's primary goal is to develop a herbal cream which can give synergistic and multipurpose effect, like moisturizer, reduce acne and skin irritation, reduce skin diseases like eczema, psoriasis, dry skin, wrinkles, rashes etc. and also adding glow to the face. [2,6]. Neem, aloe vera gel, and tulsi are among the herbal ingredients we used to produce the synergistic herbal cream. Aloe Vera gel is applied as a moisturizer, helps heal burn wounds, and minimizes acne and zits. Tulsi is used as an antioxidant that also gives the face a radiant appearance, and neem is used as an anti-inflammatory and antibacterial that also helps to reduce scars, pigmentation, redness, and irritation of the skin. Materials used to enhance appearances or beautify the skin

have been referred to as cosmetics since that period. People have been beautifying their skin with polyherbal or herbal cosmetics since ancient times. The water in oil emulsion is called cold cream. Compared to other semisolid dosage forms or formulations, cold cream provides a longer contact time at the application site. They make the skin appear elegant and less oily. The oil phase provides the skin with emollience. The purpose of the cold cream is to cool the body and replenish moisture to dry skin by removing waste products from the pores. It is simple to wash and remove with water. They are non-conservation to the skin. It gets liquefy at body temperature natural pores. [1,2]

Advantages of herbal cold cream:

- 1) It prevents aging and dehydration.
- 2) As cold creams contain enough amount of water and oil, they keep skin safe from the rough environments.
- 3) They also keep skin moisturized and safe.
- 4) Cold creams are designed to remove makeup and smooth the skin.
- 5) Medicated cold creams is mainly used as topical pharmaceutical dosage form for the treatment of skin.
- 6) To help in the maintenance of moisture balance of skin and avoid rough skin of cold cream.
- 7) To provide an emollient effect and oily protective layer on skin.
- 8) Also, provide a chemical barrier as with sun block ingredients. [2,4,5]

Ideal characteristics of cold cream:

- 1) It should have the ideal consistency to allow for easy application and removal from the container.
- 2) Normally, it should not be diluted.
- 3) Its pH should ideally range from 4.6 to 6.0.
- 4) It should have low sensitization index.
- 5) It should be elegant in appearance.
- 6) It should be non-dehydrating, non-greasy and non staining.
- 7) It should not cause irritation to the skin and following application; the skin should experience a cooling effect.
- 8) It should not alter the membrane or skin functioning.
- 9) To prevent water from evaporating from skins surface, it must create, a thin, waxy protective coating on the skin.

Ingredients used in formulation:

Collection of Material:

- 1) Aloe vera gel: Marketed preparation of aloe vera gel was purchased and used for the preparation of cream.
- 2) Neem oil: Marketed preparation of neem oil was purchased and used for the formulation purpose.
- 3) Tulsi: Tulsi leaves were collected and washed with distilled water and dried in hot air oven. Then after proper drying the leaves were powdered. Then 1g of tulsi powder + 10ml of dimethyl sulfoxide was taken in volumetric flask and then shaken for 3 d on REMI RSB-12 mechanical shaker. Then the solution was heated on water bath at 80 to 100 degree Celsius for few minutes and then concentrated upto 5ml and filtered using a muslin cloth to remove impurities. Then the filtrate or the filter product in which a clear solution or clear extract of Tulsi leaves was used in the preparation.



4) with distilled wialteavers dwere collected and wahed

Role of each Ingredient:

Sr.No	Ingredients	Roles
1.	Aloe vera gel	Anti-ageing, anti-inflammatory, moisturizer, reduce acne and pimples.
2.	Neem	Anti-inflammatory, antibacterial, reduces pigmentation, promote wound healing, relieves skin dryness, itching and redness.
3.	Tulsi	Antioxidant prevents premature ageing, remove blemishes, adds glow to the face.
4.	Bees wax	Emulsifying agent, stabilizer and gives thickness to the cream.
5.	Lanolin Alcohol	Emollient, emulsifying, viscosity controlling
6.	Liquid paraffin	Lubricating agent
7.	Mineral oil	Emollient, solvent
8.	Petrolatum	Emollient
9.	Glycerin	Skin-identical ingredient, moisturizer, humectant
10.	Methylparaben	Preservative
11.	Rose oil	Fragrance

Formulation of cream:

The waxes were melted at 75°C, and the ingredients were well mixed, to prepare the oil phase. The water-soluble components were dissolved in deionized water to create the aqueous phase. Once every ingredient was dissolved, the water phase was heated to a temperature of 75–80°C. The aqueous phase was gradually added to the oil phase with gentle agitation once the water and oil phases reached the same temperature. The mixture was then continuously agitated until the temperature dropped to 40°C. A semisolid cream base was formed by cooling the emulsion to room temperature. Using an overhead stirrer, warm deionized water was used to dissolve zinc and copper sulfates, which were then added to the cream base. For fifteen minutes, the mixture was agitated to achieve a homogenous formulation.

Composition of Cream:

Sr.No	Ingredients	Quantity
1.	Mineral Oil	1.5ml
2.	Petrolatum	3.5ml
3.	Glycerin	Q.S
4.	Bees wax	3g
5.	Liquid paraffin	10ml
6.	Aloe Vera gel	1.5ml
7.	Tulsi	1.5ml
8.	Neem	0.5ml
9.	Methylparaben	0.02
10.	Rose oil	Q.S
11.	Distilled Water	Q.S





Physical Evaluation of Formulations

1. Appearance:

Parameters Result S. No. its Faint green 1. Color state. Odor Pleasant 2. Smooth 3. **Texture** Semisolid 4. State

Appearance of cream was evaluated by judging its color, odor, texture and

2. Washability

Washability test was carried out by applying a small amount of cream on the hand and then washing it with tap water.

Result: Washing the formulations was simple.

3. Irritancy study observations

On the dorsal surface of the left hand, mark the area (1 cm2). After that, the region was treated with the cream, and the time was recorded. No redness, edema, inflammation, and irritation was found during irritancy study. Thus, the prepared formulation was safe to use for skin.

Result: Nil Irritant, erythema and edema effect.

4. <u>P</u>^H

A digital PH meter was used to measure the pH after 0.5 g of cream had been distributed in 50 ml of distilled water.

- **5.** Result: P^H of formulation was found to be 6.7 which is nearer to skin P^H, so it can be safely used on the skin.
- **6.** <u>Viscosity:</u> Viscosity of cream is measured by using Brooke field viscometer at a temperature of 25 °C using spindle No. 63 at 2.5 RPM.

Results: Formulations showed adequate viscosity

7. Spreadability

Spreadability of the formulations was determined by measuring the spreading diameter of 1 g of sample between two horizontal glass plates (10 cm × 20 cm) after one minute. The standard weight applied to the upper plate was 25 g. Each formulation was tested three times.

Result: Better Spreadability

8. <u>Greasiness</u> Here the cream was applied on the skin surface in the form of smear and checked if the smear was oily or grease-like.

Results: formulation is non-greasy.

Conclusion:

To sum up, the review conducted on the creation and assessment of a herbal cold cream has yielded significant knowledge regarding the process of creating a natural skincare product. We are able to make a cold cream with skin advantages by carefully choosing and mixing herbal elements that are known for their nourishing and protecting qualities. By employing stringent assessment techniques such as chemical, physical and sensory testing, we managed to guarantee the products safety, stability, and effectiveness. The study demonstrated how crucial it is to take into account aspects like texture, fragrance, ingredient, compatibility, and overall effectiveness when creating a herbal cold cream. We were able to formulate a high-quality product that satisfies customer needs and expectations by paying close attention to these elements and carrying out exhaustive study.

Overall, the project has deepened our understanding of the formulation and evaluation processes involved in creating herbal skincare products. It has also underscored the potential pf the natural ingredients to provide effective and gentle skincare solutions.

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